

OVERSIGHT OF PROJECT FUNDING AND OUTCOMES
COASTAL PROTECTION AND RESTORATION AUTHORITY



PERFORMANCE AUDIT SERVICES
ISSUED JANUARY 20, 2016

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LOUISIANA LEGISLATIVE AUDITOR
DARYL G. PURPERA, CPA, CFE

January 20, 2016

The Honorable John A. Alario, Jr.,
President of the Senate
The Honorable Taylor Barras,
Speaker of the House of Representatives

Dear Senator Alario and Representative Barras:

This report provides the results of our performance audit on the Coastal Protection and Restoration Authority (CPRA). The purpose of this report is to evaluate CPRA's oversight of project funding and outcomes and to identify how CPRA could help the state receive the additional funding needed to fully implement the coastal protection and restoration projects in the Master Plan.

The report contains our findings, conclusions, and recommendations. Appendix A contains CPRA's response to this report. I hope this report will benefit you in your legislative decision-making process.

We would like to express our appreciation to the management and staff of CPRA for their assistance during this audit.

Sincerely,

Daryl G. Purpera, CPA, CFE
Legislative Auditor

DGP/aa

CPRA 2015

Louisiana Legislative Auditor

Daryl G. Purpera, CPA, CFE



Oversight of Project Funding and Outcomes Coastal Protection and Restoration Authority

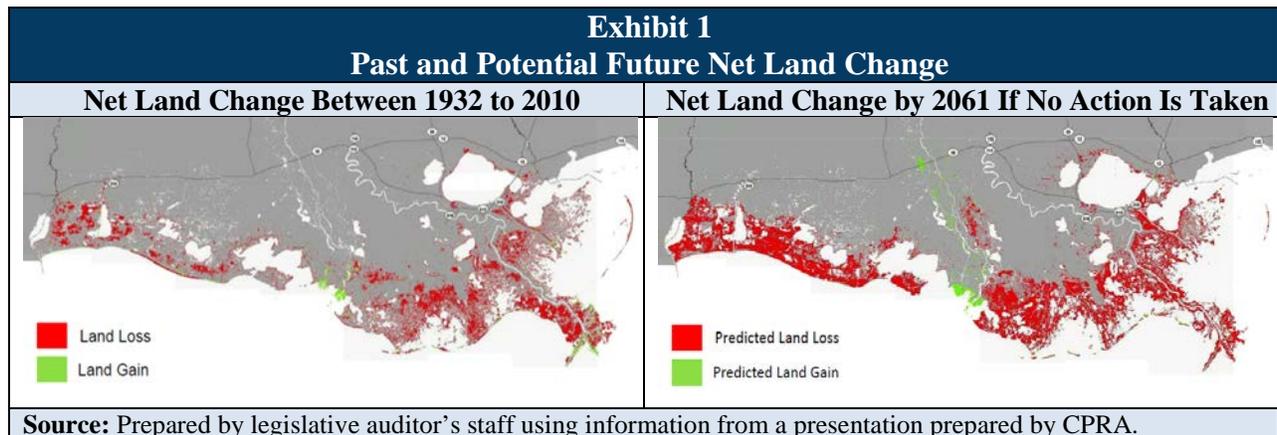
January 2016

Audit Control # 40150007

Introduction and Summary of Findings

This report provides the results of our performance audit on the Coastal Protection and Restoration Authority (CPRA). In 2009, Act 523 created CPRA as an implementation and enforcement arm of the CPRA Board. CPRA is tasked with updating and implementing a Master Plan to address coastal issues in Louisiana. CPRA issued its first Master Plan update in 2012,¹ which includes a 50 year, \$50 billion budget for 109 projects that are designed to help prevent and restore coastal land loss and increase flood protection in Louisiana.

According to CPRA, since the 1930s, Louisiana has lost 1,883 square miles of land, and is currently losing land (primarily wetlands and barrier islands) at a rate of 16 square miles per year.² If no action is taken, Louisiana could lose approximately 1,765 square miles of land over the next 46 years, which equates to approximately 854,260 football fields of land or more than 10 times the land area that makes up the city of New Orleans. Exhibit 1 shows the potential land loss if no action is taken.



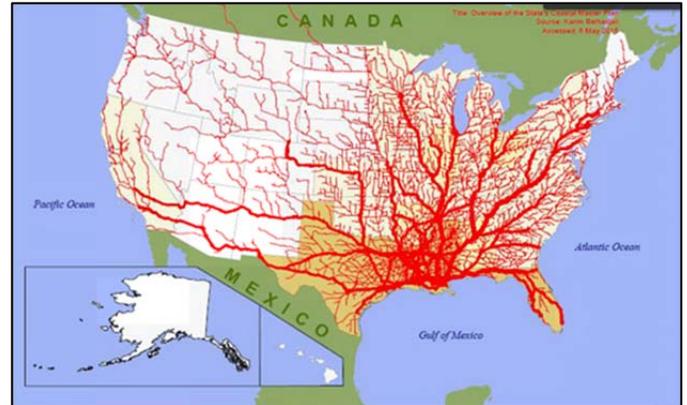
¹ The first Master Plan was issued in 2007 under the direction of the CPRA Board.

² Wetlands are important as they serve as storm surge barriers, which reduce the risk of flooding. Barrier islands serve as the first line of defense from storm surge by providing barriers that reduce the severity of winds and ocean waves before they reach the mainland, and they protect coastal wetlands from erosion.

Coastal protection and restoration projects are not just important to Louisiana, but also to the nation as a whole for the following reasons:

- More than \$100 billion worth of infrastructure is concentrated along Louisiana's Gulf Coast to support state and national coastal and offshore oil and gas exploration, production, transportation, and refining.
- Louisiana is among the top port states in the nation by total annual tonnage and is responsible for an average of \$134 billion in imports and exports annually, as shown in Exhibit 2.
- The lives of Louisiana residents and the preservation of its unique culture depend on the eroding wetlands and barrier islands.
- Louisiana's coastal wetlands provide habitats for multiple species of marine life.

Exhibit 2
Distribution of Cargo from Louisiana Ports throughout the United States



Source: Prepared by legislative auditor's staff from a presentation prepared by CPRA.

The objective of this audit is to evaluate CPRA's oversight of project funding and outcomes and to identify how CPRA could help the state receive the additional funding needed to fully implement Master Plan projects. Overall, we found the following:

- CPRA has identified \$19.5 billion in potential funding for the \$50 billion Master Plan; however, only \$9.7 billion of this potential funding is guaranteed.
- CPRA did not account for inflation and project scope changes in its cost projections, which could increase or decrease the total estimated funding needed to complete Master Plan projects.
- Until fiscal year 2015, CPRA management was unable to determine actual state costs, including contract expenditures on a project-by-project basis. However, CPRA converted to a new accounting system in 2015 that will allow them to track actual project costs.
- CPRA has not verified that the state matches for cost-sharing projects led by the federal government are correct. Since 2008, the state's cost share for Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) projects led by the federal government has been \$47.7 million. However, CPRA has not verified the accuracy of this amount.
- CPRA does not require that pre-construction agreements with levee districts for protection projects outline the estimated operation and maintenance costs or how

these costs will be paid. Without proper maintenance, the lifespan of projects may be shortened by the natural environment and its intended benefits may not be fully realized.

- CPRA does not evaluate whether projects are meeting the objectives in the Master Plan. This information is important because it shows whether expected results are being achieved.
- To increase the transparency of its activities, CPRA should develop a public report to communicate actual funding and expenditures and whether Master Plan objectives are being met. Showing this information may also help the state attract the additional funding it will need to fully implement its Master Plan.

Appendix A-1 contains CPRA's response to our report under the previous executive director; Appendix A-2 contains CPRA's response from the new executive director. Appendix B contains our scope and methodology, and Appendix C provides an overview of CPRA and a brief history of the agency.

Objective: To evaluate CPRA's oversight of project funding and outcomes and to identify how CPRA could help the state receive the additional funding needed to fully implement Master Plan projects.

Master Plan projects are vital to the coastal issues Louisiana is facing, but they cannot be implemented without sufficient, guaranteed funding. CPRA funds its projects using a combination of federal funds, constitutionally-dedicated state funds, and one-time disaster relief funds, as shown in Exhibit 3. Appendices D and E provide more detail on the projects completed, projects still in progress, and the source of project funding. As also shown in Exhibit 3, CPRA estimates that approximately \$12.4 billion worth of coastal protection and restoration projects have been constructed or are under construction since 2008. This includes approximately \$400 million (3%) for work related to the \$50 billion Master Plan, resulting in billions of dollars of work remaining.

Exhibit 3			
Estimated Project Costs by Funding Source			
Coastal Protection and Restoration Projects			
January 1, 2008, through June 30, 2015			
Funding Source	Constructed	Under Construction	Total
State	\$1,408,558,225	\$206,457,389	\$1,615,015,614
Federal	6,722,997,077	3,553,208,506	10,276,205,583
Oil-Spill	366,840,226	147,063,587	513,903,813
Total	\$8,498,395,528	\$3,906,729,482	\$12,405,125,010
Source: Prepared by legislative auditor's staff using information obtained from CPRA.			

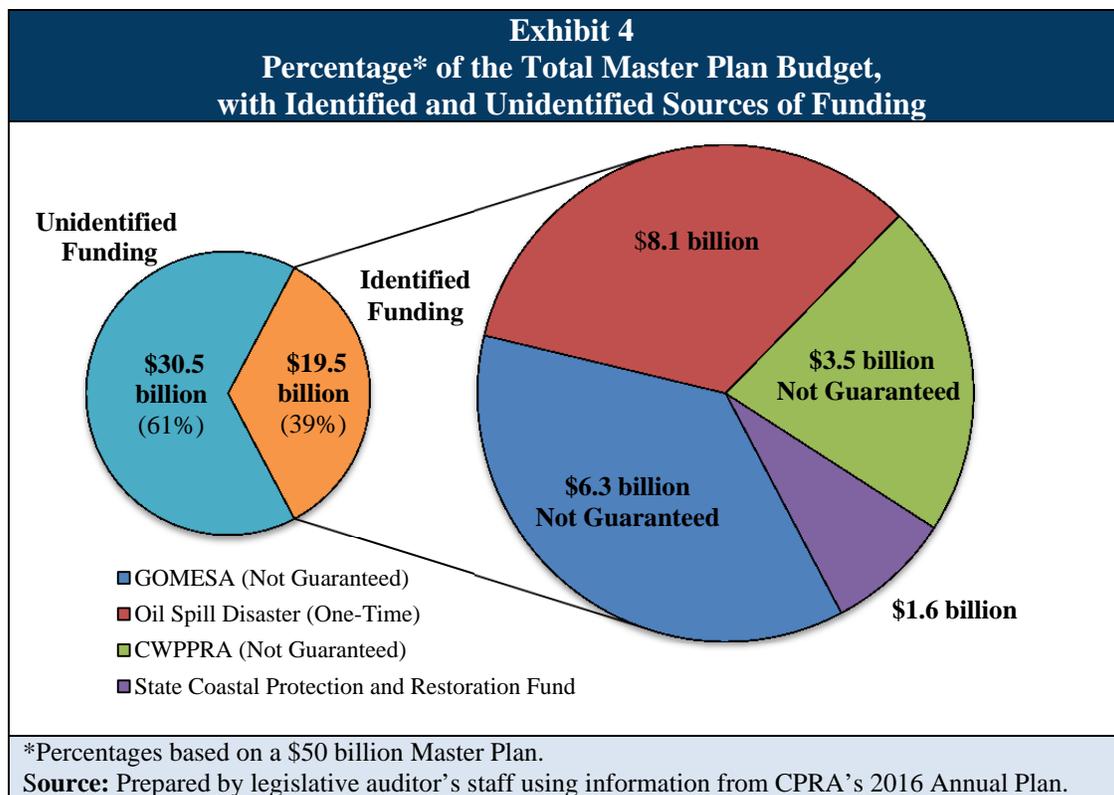
Of the \$50 billion CPRA estimates is needed to fully implement all Master Plan projects, the agency has identified as much as \$19.5 billion (39%) in potential funding. However, only \$9.7 billion of this funding is guaranteed. In addition, CPRA did not include inflation and scope increases in the Master Plan, so the amount of funding needed is likely higher. To help the state attract the additional funding it will need, CPRA should determine the actual state costs for each project and measure whether projects meet the objectives of the Master Plan. Greater transparency through public reporting of CPRA's financial activities and project outcomes will help demonstrate that the dollars the state received were spent for their intended purpose. These areas are discussed in more detail below.

CPRA has identified \$19.5 billion in potential funding for the \$50 billion Master Plan; however, only \$9.7 billion of this potential funding is guaranteed.

According to CPRA, the \$50 billion estimate to implement the Master Plan represents the minimum amount required to provide Louisiana with the resources needed to significantly reduce coastal land loss and adequately reduce storm surge flood risk. Of the \$50 billion, CPRA has identified approximately \$19.5 billion (39%) in potential funding. However, only \$9.7 billion

(50%) of this potential funding is guaranteed. The \$9.7 billion in guaranteed funding consists of up to \$8.1 billion in one-time oil spill disaster funds and \$1.6 billion from the Coastal Protection and Restoration Trust Fund and interagency transfers from the Department of Transportation and Development.

The remaining \$9.8 billion in potential funding is not guaranteed and consists of \$6.3 billion from the Gulf of Mexico Energy Security Act (GOMESA) and \$3.5 billion from the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA).³ CPRA anticipates receiving \$140 million per year (beginning in FY 2018) from GOMESA, but this funding could be redirected by Congress for other environmental initiatives. Also, although CPRA anticipates receiving approximately \$74.2 million annually from the CWPPRA program for coastal wetlands restoration, and the program has been in effect for 25 years, it will require reauthorization by 2019 to continue. Exhibit 4 summarizes identified and unidentified sources of funding.



Recommendation 1: CPRA should continue to proactively identify additional sources of guaranteed revenue so that it can fully implement all Master Plan projects.

Summary of Management’s Response: CPRA concurs with the finding and the recommendation. See Appendix A-1, page 1, for CPRA’s complete response.

³ This amount was based on Louisiana receiving \$140 million annually from GOMESA for 45 years, beginning in FY18, and \$74.2 million annually from CWPPRA over the next 47 years, the remaining number of years in the Master Plan’s implementation timeline, at the time of this analysis.

CPRA did not account for inflation and project scope changes in its cost projections, which could increase or decrease the total estimated funding needed to complete Master Plan projects.

CPRA did not include cost-increasing factors such as inflation and project scope increases when developing the Master Plan budget. As a result, the amount needed to fully fund all of its projects is likely higher. The Tulane Institute on Water Resources Law and Policy estimates⁴ that inflation could actually cause the cost of the fully-implemented Master Plan to fall between \$94.7 billion and \$113 billion, an 89% to 126% increase in CPRA's original estimate. In addition to inflation, the projects in the Master Plan may increase in cost due to unforeseen scope increases. For example, the "Morganza to the Gulf" project has substantially increased in cost projections from \$3.96 billion to approximately \$7 billion (a 77% increase) since the Master Plan was issued in 2012. This increase is the result of a number of changes to the project, such as a 36-mile extension of the levee system.

These two cost-increasing factors are similar to what occurred with the Comprehensive Everglades Restoration Plan (CERP) in Florida, which began in 2000. The CERP began as a 30-year plan with an original price tag of \$8.2 billion. However, in its 2010 update, the budget for this plan increased by 65%, or \$5.3 billion, to \$13.5 billion due to inflation adjustments and scope changes. CPRA will have the opportunity to adjust the estimated cost of the state's Master Plan in 2017 and with each subsequent Master Plan update. In these updates, CPRA should consider amending each Master Plan's cost estimate using adjustment factors for inflation and including an allowance for increases or decreases in project scope over the years. CPRA should also clearly explain why these adjustments were made.

Recommendation 2: To provide more accurate estimates of the total coastal investment needed, CPRA should amend each Master Plan's cost estimate using adjustment factors for inflation and including an allowance for increases or decreases in project scope over the years. CPRA should also clearly explain why these adjustments were made.

Summary of Management's Response: CPRA does not concur with this finding and recommendation. According to CPRA, incorporating inflation into the cost of the projects for the 2017 Master Plan update was considered. However, after much discussion among the Master Plan team members, the decision was made to not adjust for inflation and potential project scope increases. See Appendix A-1, pages 1-2, for CPRA's complete response.

LLA Additional Comments: Accounting for inflation and project scope changes in Master Plan cost projections would more accurately depict the true cost of the Master Plan projects.

⁴ Financing the Future - Turning Coastal Restoration and Protection Plans Into Realities: The Cost of Comprehensive Coastal Restoration and Protection (2014)

Until fiscal year 2015, CPRA management was unable to determine actual state costs, including contract expenditures on a project-by-project basis.

From January 1, 2008, through June 30, 2015, CPRA estimates that the state has spent \$620.6 million⁵ in state revenue and oil-spill relief dollars for 64 completed projects and has spent or allocated another \$353.5 million⁶ for 21 projects that are under construction.⁷ During fiscal year 2015, CPRA had 207 contracts with a net contract amount of \$960 million for the implementation of Master Plan projects. Appendices F and G show a list of CPRA contracts in fiscal year 2015 and the total contract amount for each contractor. Services provided by these contracts include general administration services (e.g. legal), environmental services, project feasibility studies, project design services, project construction in which CPRA contracts directly for services, and agreements with local governments to provide funding for locally-led construction work. However, CPRA management could only provide estimated cost information because it was unable to determine what has actually been spent on each project.

According to CPRA, the state's accounting system it used prior to 2015 did not allow it to record expenditure information on a project-by-project basis. Although project managers assigned to each project track contract expenditures for their projects, CPRA management was not able to calculate costs for all projects using its accounting system. CPRA recognized the state's accounting system as a limitation to reporting cost on a project-by-project basis and was one of the first agencies to convert its financial accounting system to LaGov. This new system allows CPRA to account for actual expenditures on each project.

Recommendation 3: CPRA should record how much has been spent on a project-by-project basis for coastal protection and restoration, including how much has been spent on contracts for each project.

Summary of Management's Response: CPRA concurs with the finding and recommendation. See Appendix A-1, page 2, for CPRA's complete response.

⁵ As shown in Exhibit 3 on page 4 of this report, State Constructed amount (\$1,408,558,225) + Oil-Spill Constructed amount (\$366,840,226) - \$1,154,847,077 (not shown in Exhibit 3). The approximately \$1.15 billion represents the state's obligation (excluding interest) of HSDRRS projects that it has not yet begun to repay.

⁶ As shown in Exhibit 3 on page 4 of this report, State Under Construction amount (\$206,457,389) + Oil-Spill Under Construction amount (\$147,063,587).

⁷ The total estimated cost of these projects is \$12.4 billion, as stated in Exhibit 3. However, the federal government is responsible for the majority of this cost, and CPRA cannot track most of these expenses.

CPRA has not verified that the state matches for cost-sharing projects led by the federal government are correct.

Projects can be fully funded by the state, fully funded by a federal sponsor, or funded through cost-share agreements between the state and a federal sponsor. Currently, CPRA is only able to verify that the state's share is correct when CPRA is the project lead. However, if a federal sponsor (e.g. the United States' Army Corps of Engineers) leads a project, it pays for most expenditures up front and seeks reimbursement from the state for the balance of its share upon completion. To inform the state of its share, the federal government either sends an annual report or a letter to CPRA that includes how much the state owes for certain projects. However, CPRA has not verified that the matching amounts the state owes are correct. According to CPRA management, it has limited ability to see the details of the federal government's expenditures, even though it has requested this information in the past. Specifically, CPRA has requested information for the Louisiana Coastal Area (LCA) program,⁸ but no projects under this program have entered the construction phase. CPRA has not, however, requested this information in an attempt to verify the state's match for projects under the CWPPRA program. As of December 2015, this is the only program CPRA is cost-sharing with the federal government for construction projects that have been completed.

The federal government is the lead for some projects that fall under the CWPPRA program and all of the Hurricane Storm Damage Risk Reduction System (HSDRRS) projects. These federally-led cost-share projects were estimated to cost approximately \$3.6 billion over the last 7.5 years, with the state's share ranging from approximately 15% to 35%. Since 2008, the state's cost share for CWPPRA projects led by the federal government has been \$47.7 million. However, CPRA has not verified the accuracy of this amount. The state has not started paying back the amount owed for HSDRRS projects, which amounts to \$2.95 billion with interest over a payback period of 30 years beginning in 2019. HSDRRS contracts between the state and federal sponsors require each party to provide the other with any information or documents concerning the federally-led projects as soon as possible. As a result, CPRA has the opportunity to verify the state's share for the HSDRRS program before making any payment to the federal government.⁹

Recommendation 4: CPRA should obtain actual cost information for federally-led projects from its federal partners so that it can verify that it is paying the correct match.

Summary of Management's Response: CPRA partially concurs with the finding and the recommendation. According to CPRA, it has historically had difficulty with obtaining expenditure detail from its federal sponsors, because they have been unwilling to provide it even though CPRA has requested it. According to CPRA, it is making progress with the LCA program, and will be more aggressive with its efforts to obtain the detail from the federal sponsors to completely verify the costs of the federal sponsor. See Appendix A-1, page 2, for CPRA's complete response.

⁸ Since this program is currently conducting feasibility studies and has not entered the construction phase, it was excluded from the projects we evaluated.

⁹ CPRA has asked LLA for assistance with verifying the accuracy of the state's cost share for work conducted by the United States Army Corps of Engineers. LLA is exploring this request.

LLA Additional Comments: Although CPRA has requested federal cost information from the Corps of Engineers for the LCA program, it has not requested this information for the CWPPRA program which was the only program CPRA was cost-sharing at the time of our audit.

CPRA does not require that pre-construction agreements with levee districts for protection projects outline the estimated operation and maintenance costs or how these costs will be paid.

Operations and maintenance (O&M) is the final phase¹⁰ of a protection or restoration project. Projects require routine and major maintenance to ensure that they maintain the level of condition necessary to continue to achieve their intended purpose. Without proper maintenance, the lifespan of projects may be shortened by the natural environment and their intended benefits may not be fully realized. Specifically, for structural protection projects,¹¹ the lack of sufficient maintenance may lead to decreased flood protection and increased risk to lives and property. This could require reconstruction of the same Master Plan project in the future. In addition, if the O&M requirements for projects are not met before a disaster occurs, the federal government may deny requests for reimbursement, and local citizens may have to be responsible for the repair costs. Furthermore, flood insurance rates set by FEMA may subsequently increase in some areas, causing a larger financial burden on local communities.

After the completion of protection projects, the O&M responsibilities are passed down to the local governments and levee districts based on state laws and intergovernmental agreements signed between CPRA and levee districts before construction begins.

Outlining the estimated O&M cost and how it will be paid in the pre-construction intergovernmental agreement (IGA) may help levee districts better prepare for these future costs. Because levee districts are required to operate and maintain protection projects once completed,¹² they must sign an IGA with CPRA stating it will be their sole responsibility to “operate, maintain, repair, replace, and rehabilitate completed projects.” However, CPRA does not require that this agreement include the estimated O&M cost or require districts to actually show a plan of action and timeline for how funding will be secured. Because districts may have to obtain additional revenue through flood protection millage increases to maintain federal compliance, including this information in the IGA may help prevent projects from falling out of compliance with federal standards due to lack of funding after the project is completed. For example, on November 21, 2015, Jefferson Parish voters rejected a 5.5-mil property tax increase that would have provided funding to maintain and operate the West Bank’s flood protection system.

¹⁰Typical project phases include planning, engineering and design, construction, and operation and maintenance.

¹¹ In the Master Plan, protection projects are defined as either structural or non-structural. Structural projects include levees, concrete walls, flood gates, and pumps. Non-structural projects include risk reduction measures such as elevating or flood-proofing buildings.

¹² Restoration projects also need O&M, but these costs are comparably smaller and typically covered by the state or federal government.

Of the 109 projects in the 2012 Master Plan, 15 protection projects will require levee districts to pay for major O&M costs. As of November 2015, only two of these projects had entered the construction phase. This gives CPRA an opportunity to start requiring levee districts to show how they will pay for O&M costs when the IGA is signed. Exhibit 5 summarizes the 15 protection projects that will require local levee districts to pay for their O&M costs.

Exhibit 5 - Master Plan Structural Protection Project List				
Protected Area* (by Levee District)	Project Names	Population	Estimated Cost of Projects	Per Capita Cost of Project
Lafitte and Vicinity	1. Lafitte Ring Levee	7,000**	\$870,000,000	\$124,286
St. Mary Parish	2. Amelia Levee Improvements (3E)	54,650	\$1,703,000,000	\$31,162
	3. Morgan City Back Levee			
	4. Bayou Chene Floodgate			
	5. Berwick to Wax Lake			
	6. Franklin and Vicinity			
Terrebonne and Lafourche Parish	7. Morganza to the Gulf (high)*** <i>(has entered the construction phase)</i>	208,178	\$3,964,000,000	\$19,041
Vermilion and Iberia Parish	8. Abbeville and Vicinity	131,239	\$2,307,000,000	\$17,579
	9. Iberia/Vermilion Upland Levee			
St. John the Baptist Parish	10. Greater New Orleans LaPlace Extension	45,924	\$457,000,000	\$9,951
GNO/SLFPA - E	11. Greater New Orleans High Level	623,508	\$1,611,000,000	\$2,584
Lafourche Parish	12. Maintain Larose to Golden Meadow <i>(has entered the construction phase)</i>	96,318	\$228,000,000	\$2,367
GNO/SLFPA-W	13. Maintain West Bank Levees	179,571	\$193,000,000	\$1,075
St. Tammany Parish	14. Lake Ponchartrain Barrier	233,740	\$157,000,000	\$672
	15. Slidell Ring Levee			
<p>Source: Prepared by legislative auditor's staff using 2012 Master Plan and 2010 Census Data. *These protected areas were selected based on the geographic area(s) that contain the majority of the structural protection projects listed. However, some projects cross over into one or more additional areas. Information regarding the actual area(s) and population(s) that will be responsible for these costs is not yet available. ** Estimation provided by Lafitte Area Independent Levee District personnel. *** This reflects a single project – Morganza to the Gulf – which has increased to almost \$7 billion, which is not reflected in the Master Plan.</p>				

As shown in Exhibit 5, some of the most expensive projects will have to be maintained by a smaller population compared to projects that have a larger tax base. For example, St. Mary Parish has a population of approximately 54,650, but will be responsible for maintaining \$1.7 billion worth of protection projects to provide greater flood protection for the area. Including the estimated O&M costs and how it will be funded in the IGA is important because, as seen in Exhibit 5, small tax bases in some local levee districts could result in districts struggling to find the resources to maintain completed and future projects.

Recommendation 5: CPRA should require that IGAs with local entities outline estimated costs for operation and maintenance. The IGA should also require that local entities include a plan of action and timeline for how the funding will be secured.

Summary of Management’s Response: CPRA concurs with the finding and recommendation. See Appendix A-1, page 3, for CPRA’s complete response.

CPRA does not evaluate whether projects are meeting the objectives in the Master Plan.

As coastal protection and restoration funding is invested in projects to address Louisiana’s coastal needs, it is important for CPRA to show outcomes the state received in return for the money spent, such as increased flood protection and whether these outcomes meet the Master Plan’s objectives. While CPRA does pre-screen projects through computer modeling to determine whether these projects will align with the Master Plan objectives, CPRA has not yet developed measurements to evaluate whether projects are meeting the Master Plan’s objectives as the projects are completed. Exhibit 6 shows the Master Plan objectives.

CPRA management currently uses two performance indicators to report the results of coastal protection and restoration projects in the Executive Budget and their annual plan. These indicators are “*Acres Directly Benefited by Projects Constructed*” and “*Miles of Levee Improved by Project being Constructed.*”

Exhibit 6 2012 Master Plan Objectives

1. **Flood Protection** - Reduce economic losses from storm surge based flooding to residential, public, industrial, and commercial infrastructure.
2. **Natural Processes** - Promote a sustainable coastal ecosystem by harnessing the natural processes of the system.
3. **Coastal Habitats** - Provide habitats suitable to support an array of commercial and recreational activities coast-wide.
4. **Cultural Heritage** - Sustain the unique cultural heritage of coastal Louisiana by protecting historic properties and traditional living cultures and their ties and relationships to the natural environment.
5. **Working Coast** - Promote a viable working coast to support regionally- and nationally-important businesses and industries.

Source: Prepared by legislative auditor’s staff using the 2012 Master Plan.

Although CPRA projects have created or improved 27,457 acres of land and 264 miles of levees, it has not reported on the impact these acres and miles have had on achieving the Master Plan's objectives. For example, although the "acres benefited" indicator may show that the state has gained land from completed projects, it does not show if the state's net land gain or loss over a given period of time has improved and how it benefits the coast and residents.

Good outcome performance indicators¹³ should measure results and assess impact and effectiveness. These indicators are important because they show whether expected results are being achieved. CPRA should consider measuring Master Plan objectives by creating interim performance targets, comparing indicator results over time, and developing a mix of scientific indicators that can be easily understood by other third-party stakeholders as the projects are being completed. While CPRA has listed indicators on net land gained and reductions in expected annual damage in its strategic plan, it has not begun to calculate or report these indicators and these alone are not sufficient to show that all objectives of the Master Plan are being met. Therefore, CPRA should be proactive in developing indicators that measure project outcomes and how those outcomes address the Master Plan's objectives. This would help the state attract the additional financial support it needs to fully implement the Master Plan.

Recommendation 6: CPRA should measure whether its projects are meeting the Master Plan's objectives.

Summary of Management's Response: CPRA partially concurs with the finding and recommendation. According to CPRA, all projects are vetted through a rigorous evaluation to determine if it will meet one or more master plan objectives. See Appendix A-1, page 3, for CPRA's complete response.

LLA Additional Comments: While CPRA does pre-screen projects through computer modeling to determine whether these projects will align with the Master Plan objectives, CPRA has not yet developed measurements to evaluate whether projects are actually meeting the Master Plan's objectives as the projects are completed. CPRA should consider measuring Master Plan objectives by creating interim performance targets, comparing indicator results over time, and developing a mix of scientific indicators that can be easily understood by other third-party stakeholders.

To increase the transparency of its activities, CPRA should develop a public report to communicate actual funding and expenditures and whether Master Plan objectives are being met.

Per state law (R.S. 49:214), CPRA issues an annual report each year that includes a three-year funding projection and a description and status of all projects pertaining to integrated coastal protection. However, this annual report does not show actual funding and expenditures or how the coastal protection and restoration projects meet the objectives of the Master Plan. To

¹³ Per Manageware, the state's "how to" guide for its performance-based budgeting process.

increase its transparency, CPRA should develop a report that includes this information. Providing this information may also help the state attract the additional funding it will need to fully implement its Master Plan.

Stakeholders we met with stated that public reporting is important to demonstrate accountability for funds. As the Public Affairs Research Council reported in 2014, it is likely that the state is being watched closely by Congress and stakeholder organizations to determine how responsible and transparent it will be with the coastal funding it currently has and the funding it will begin to receive in the relatively near future. If stakeholders could evaluate the details of how coastal funds were spent, this may increase the confidence that these funds are being used properly.

As an example of reporting actual funding and expenditures for such a large scale initiative, Florida's Comprehensive Everglades Restoration Plan (CERP) developed an annual report that includes detailed, actual prior-year budget information for both state and federal funding sources. Also, to determine and communicate how well restoration goals are being met, CERP developed a set of system-wide ecological indicators that demonstrate how the ecosystem is responding to restoration and management activities. These indicators are reported every two years.

Recommendation 7: CPRA should develop a public report, either in the annual plan or in a separate report, communicating actual project funding and expenditures, as well as how Master Plan objectives are being met.

Summary of Management's Response: CPRA concurs with the finding and recommendation. See Appendix A-1, page 3, for CPRA's complete response.

Matter for Legislative Consideration: Similar to Florida, the legislature may want to consider requiring that CPRA report on its progress toward meeting the Master Plan's objectives.

APPENDIX A: MANAGEMENT'S RESPONSE



State of Louisiana

BOBBY JINDAL
GOVERNOR

January 5, 2016

Daryl G. Purpera, CPA, CFE
Louisiana Legislative Auditor
P.O. Box 94397
Baton Rouge, LA 70804

RE: Performance Audit – Coastal Protection and Restoration Authority

Dear Mr. Purpera:

Your staff recently conducted a Performance Audit on the Coastal Protection and Restoration Authority. We have reviewed the report and provide the following response to each finding and recommendation.

Finding #1: CPRA has identified \$19.5 billion in potential funding for the \$50 billion Master Plan; however, only \$9.7 billion of this identified funding is guaranteed.

Recommendation #1: CPRA should continue to proactively identify additional sources of guaranteed revenue so that it can fully implement all Master Plan projects.

- CPRA concurs with the finding and the recommendation.

Finding #2: CPRA did not account for inflation and project scope changes in their cost projections which could increase or decrease the total estimated funding needed to complete Master Plan projects.

Recommendation #2: To provide more accurate estimates of the total coastal investment needed, CPRA should amend each Master Plan's cost estimate using adjustment factors for inflation and including an allowance for increases or decreases in project scope over the years. CPRA should also clearly explain why these adjustments were made.

- CPRA does not concur with this finding and recommendation. During the audit process, we explained to the audit team that incorporating inflation into the cost of the projects for the 2017 Master Plan update was considered. However, after much discussion among the Master Plan team members, the decision was made to not adjust for inflation and potential project scope increases for the following reasons:
 - The \$50 billion dollar figure is intended as a funding constraint rather than a price tag for coastal restoration and protection. Enforcing this realistic constraint allows for the prioritization of projects within a reasonable budget.
 - Implementation of the Master Plan occurs by funding individual projects within the plan as dollars become available.

A-1.1

Executive Division

- Master Plan project cost estimates are based on real data from current projects. New cost data is incorporated into the five year update and cost estimates are adjusted accordingly.
- Over a planning horizon of 50 years, it is difficult to account for factors such as improvements in technology, market competition (dredging) or other advancements that could drive project costs down.
- During the ongoing 2017 Master Plan development, we will communicate in the Master Plan the decisions made regarding incorporation of inflation and potential project scope increases so that all interested parties have a clear understanding.

Finding #3: Until fiscal year 2015, CPRA management was unable to determine actual state costs, including contract expenditures on a project-by-project basis. However, CPRA converted to a new accounting system in 2015 which will allow them to track actual project costs.

Recommendation #3: CPRA should use LaGov to record how much has been spent on a project-by-project basis for coastal protection and restoration including how much has been spent on contracts for each project.

- CPRA concurs with the finding and the recommendation. We will utilize the LaGov accounting system to the fullest extent available to us. Reporting expenditures by project and by funding source is essential, and CPRA is committed to increased transparency on project expenditures.

Finding #4: CPRA has not verified that the state matches for cost sharing projects led by the Federal government are correct.

Recommendation #4: CPRA should obtain actual cost information for federally led projects from its federal partners so that it can verify that it is paying the correct match.

- CPRA partially concurs with the finding and the recommendation. CPRA has historically had difficulty with obtaining expenditure detail from its federal sponsors, because they have been unwilling to provide it. Therefore, it is not as simple as stated in the finding. As explained to the audit team, CPRA has limited ability to see the details of the Federal government's expenditures even though it has been requested by CPRA. We are making progress with the LCA program, and will certainly be more aggressive with our efforts to obtain the detail from the federal sponsors to completely verify the costs of the federal sponsor. CPRA cannot force the federal sponsors provide the detailed information.
- CPRA has engaged the Legislative Auditor's Office to audit the Corps of Engineers' expenditures on the Hurricane Storm Damage Risk Reduction System, which is a cost-share arrangement. It is not yet known if we will be able to gain access to the Corp's records.

Finding #5: CPRA does not require that pre-construction agreements with levee districts for protection projects outline the estimated operation and maintenance costs or how these costs will be paid.

Recommendation #5: CPRA should require that intergovernmental agreements (IGA) with local entities outline estimated costs for operation and maintenance. The IGA should also require that local entities include a plan of action and timeline for how the funding will be secured.

- CPRA concurs with the finding and recommendation. We will begin working with the levee districts to incorporate an estimate for operation and maintenance costs as well as a plan of action and timeline for the district to secure appropriate funding.

Finding #6: CPRA does not evaluate whether projects are meeting the objectives in the Master Plan.

Recommendation #6: CPRA should measure whether their projects are meeting the Master Plan's objectives.

- CPRA partially concurs with the finding and recommendation. As stated in the report, "While CPRA does pre-screen projects through computer modeling to determine whether these projects will align with the Master Plan objectives, CPRA has not yet developed measurements to evaluate whether projects are meeting the Master Plan's objectives, as shown in Exhibit 6." All projects are vetted through a rigorous evaluation to determine if it will meet one or more master plan objectives.
- There is an evaluation process during Master Plan development that helps us understand a project's ability to meet the master plan objectives. Project ideas are first evaluated based on preliminary screening criteria which include size threshold, geographic area, adequate information, consistency with Master Plan principles and objectives, and duplicative effects.
- This preliminary screening process results in a list of candidate projects. The candidate projects are then modeled and evaluated on their ability to build and maintain land and reduce damages from storm surge. The projects are also evaluated through the use of decision criteria, which are tied directly to the five objectives of the master plan. The results of this technical analysis and feedback from the public inform which projects best meet the Master Plan objectives and are, therefore, included in the plan.

Finding #7: To increase the transparency of their activities, CPRA should develop a public report to communicate actual funding and expenditures and whether Master Plan objectives are being met.

Recommendation #7: CPRA should develop a public report, either in the annual plan or in a separate report, communicating actual project funding and expenditures as well as how Master Plan objectives are being met.

- CPRA concurs with the finding and recommendation. Our new financial system will provide us the ability to report this information either online or in a report.

Mr. Purpera
January 5, 2016
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We value the experience of the audit process and view it as an opportunity to discover ways to improve our methods of doing business. We fully appreciate the time and effort the audit team spent to conduct this audit and meet with many CPRA staff to understand the operations of the agency. We believe the observations noted by the auditors will be helpful to us as we move forward with implementing the Master Plan projects.

Should you have any questions or need additional information regarding our response, please contact me or Janice Lansing, Chief Financial Officer, at 342-7308. We look forward to working with you and your staff again.

Sincerely,

A handwritten signature in blue ink, appearing to read 'K. Graham', with a long horizontal flourish extending to the right.

Kyle Graham
Executive Director

c: Janice Lansing, Chief Financial Officer



State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

January 15, 2016

Daryl G. Purpera, CPA, CFE
Louisiana Legislative Auditor
P.O. Box 94397
Baton Rouge, LA 70804

RE: Performance Audit – Coastal Protection and Restoration Authority

Dear Mr. Purpera:

Your staff recently conducted a Performance Audit on the Coastal Protection and Restoration Authority, for which a response was provided by the previous Executive Director. As the new Executive Assistant to Governor John Bel Edwards for Coastal Activities, I have reviewed the report and am writing to provide my comments.

We also value the audit process and view it as an opportunity to discover ways to improve an agency's methods of doing business. It appears to me that the observations noted by the auditors will be helpful to us as we move forward with implementing the Master Plan projects. We plan to take each finding and recommendation seriously and to take the appropriate actions to address them. The Coastal Protection and Restoration Authority is committed to operating as efficiently and effectively as possible, and these audit findings will allow for Master Plan projects to be implemented in a more timely, cost effective, and transparent manner.

Thank you for the opportunity to respond. I look forward to working with you and your staff in the future.

Sincerely,

Johnny Bradberry
Executive Assistant - Coastal Activities

c: Janice Lansing, Chief Financial Officer

APPENDIX B: SCOPE AND METHODOLOGY

We conducted this performance audit under the provisions of Title 24 of the Louisiana Revised Statutes of 1950, as amended. The purpose and objective of this report is to evaluate the Coastal Protection and Restoration Authority's (CPRA) oversight of coastal project funding and outcomes, and to identify how CPRA could help the state receive the additional funding support needed to fully implement the Coastal Master Plan projects. Our audit covered coastal protection and restoration projects completed since the Master Plan was first issued in 2007, projects that are currently under construction, and projects that will be implemented as part of the Master Plan.

We conducted this performance audit in accordance with generally-accepted government auditing standards issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide reasonable basis for our findings and conclusions based on our audit objective. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. To answer our objective, we reviewed internal controls relevant to the audit objective and performed the following audit steps:

- Reviewed the Master Plan and interviewed CPRA staff to discuss the coastal issues that Louisiana is facing and the importance of Louisiana's coast.
- Reviewed applicable federal and state laws regarding the history of the federal and state governments' efforts in protecting and restoring Louisiana's coast.
- Conducted site visits with CPRA staff to observe different types of projects to understand why these projects are necessary and how they contribute to the protection and restoration of Louisiana's coast.
- Reviewed CPRA's Internal Monthly Progress Reports and annual reports to identify a list of projects that have been completed since 2007 and projects that are currently under construction.
- Used the Master Plan "Crosswalk" provided by CPRA (which includes a list of initiated Master Plan projects) to determine the implementation status of the \$50 billion, 50-year Master Plan.
- Researched funding sources that are significant to the implementation of the Master Plan and calculated the total percentage of the \$50 billion Master Plan that could be covered by these potential funding amounts.
- Researched the possible effect of inflation on the overall cost of the Master Plan.

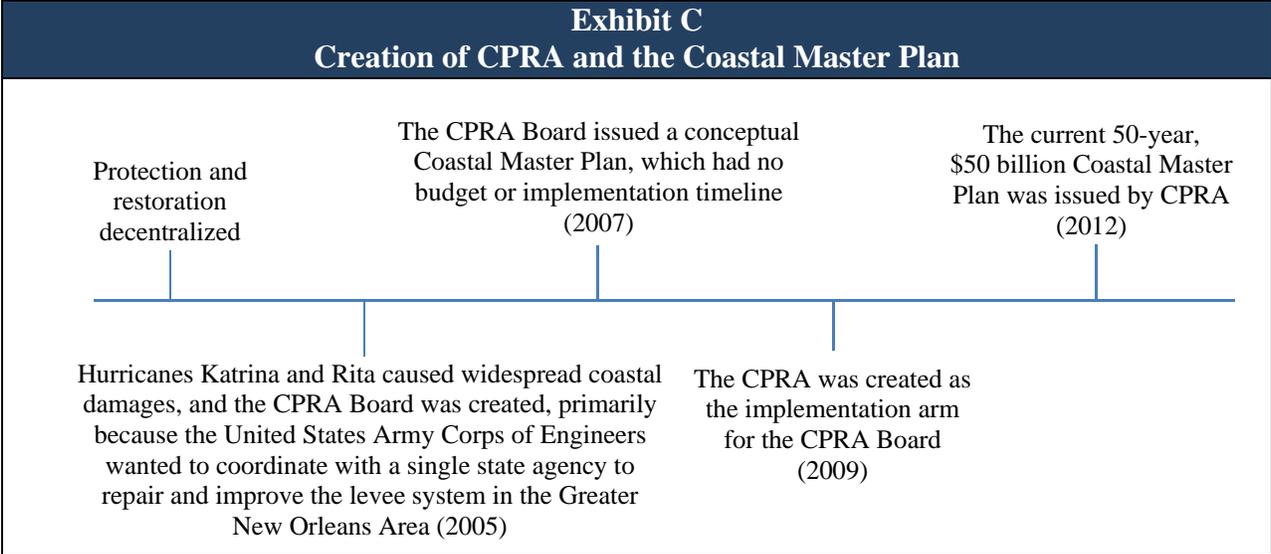
- Researched Florida's Comprehensive Everglades Restoration Plan (CERP) and determined how inflation and scope changes increased the overall cost of Florida's restoration plan.
- Compared the projected project costs and populations of areas with proposed structural protection projects to identify potential difficulties smaller parishes may have in funding the operations and maintenance costs.
- Reviewed the Executive Budget documents, CPRA's Internal Monthly Progress Reports, CPRA's Annual Plans, CPRA's Strategic Plan, and Master Plan, and interviewed CPRA staff to determine if Master Plan objectives are measured.
- Researched best practices from Florida's CERP.

APPENDIX C: OVERVIEW AND HISTORY OF CPRA

Overview of CPRA. During fiscal year 2015, CPRA had total expenditures of \$286 million. Of these expenditures, \$20.3 million (7%) was for administration, \$230.6 million (81%) was for construction projects, and \$35.1 million (12%) was for non-construction projects such as the development of a coastal monitoring system. CPRA had 169 staff and 207 contracts to oversee and implement projects during fiscal year 2015. These contracts have a net contract amount of \$960 million.

History of CPRA. In response to the devastation of hurricanes Katrina and Rita, the federal government agreed to partner with Louisiana to rebuild and improve the levee system around New Orleans if there was a single state agency to coordinate efforts and develop a plan of action to address the state’s coastal issues. In 2005, the legislature created a single oversight authority called the Coastal Protection and Restoration Authority Board (Board) and tasked the Board with developing and implementing a comprehensive coastal protection and restoration Master Plan for the state.

The Board issued the first Master Plan in 2007 with no budget or implementation timeline. In 2009, Act 523 created the Coastal Protection and Restoration Authority (CPRA), an implementation arm of the Board, through consolidation of restoration and protection personnel, primarily from the Department of Natural Resources and the Department of Transportation and Development. The Board tasked CPRA with updating the Master Plan, resulting in CPRA issuing its first updated Master Plan in 2012. The plan must be updated every five years. The development of the Master Plan represented the beginning of an estimated \$50 billion, 50-year coastal protection and restoration plan. Exhibit C below illustrates these events.



Source: Prepared by legislative auditor’s staff using information provided by CPRA.

APPENDIX D: PROTECTION AND RESTORATION PROJECTS COMPLETED (JANUARY 2008-JUNE 2015)

Project (Master Plan Related Project Highlighted in Yellow)	Date Completed	Location (Parish)	Source of Funding	Total Estimated Cost	Acres/Miles Improved
Barrier Island (BI) / Headland Restoration (HR)					
Emergency Barrier Berms	4/19/2011	St. Bernard, Plaquemines	Oil Spill	\$251,000,000	1,417 acres
Caminada Headland Beach and Dune Restoration	12/29/2014	Lafourche	CIAP (Federal)	70,679,580	303 acres
Riverine Sand Mining/Scofield Island Restoration	8/14/2013	Plaquemines	Oil Spill	60,839,484	606 acres
Pelican Island and Pass La Mer to Chalant Pass Restoration	11/28/2012	Plaquemines	CWPPRA (Federal/State Cost Share)	52,893,695	1,117 acres
Shell Island East-BERM	8/16/2014	Plaquemines	Oil Spill	47,679,580	307 acres
Cameron Parish Shoreline Restoration	4/22/2014	Cameron	State	45,800,000	523 acres
West Belle Pass Barrier Headland Restoration	11/23/2012	Lafourche	CWPPRA	39,422,093	389 acres
Pass Chalant to Grand Bayou Pass Barrier Shoreline Restoration	6/11/2009	Plaquemines	CWPPRA	37,023,827	359 acres
Whiskey Island Back Barrier Marsh Creation	10/30/2009	Terrebonne	CWPPRA	26,831,855	270 acres
East Grand Terre	11/11/2010	Jefferson	CIAP, State Surplus Funds	25,426,247	683 acres
BI/HR Total				\$657,596,361	5,974 acres
Diversion					
Bayou Lafourche Freshwater Introduction	10/5/2011	Lafourche	State Surplus	\$20,000,000	
Diversion Total				\$20,000,000	
Hydrologic Restoration					
Penchant Basin Natural Resources Plan, Increment 1	12/15/2011	Terrebonne	CWPPRA	\$18,878,814	675 acres
MRGO Closure Structure	7/20/2009	St. Bernard	Federal Hurricane Relief	14,116,500	2,343 acres
Cameron-Creole Levee Maintenance	6/6/2011	Cameron	CWPPRA	13,850,000	2,602 acres
East Sabine Lake Hydrologic Restoration	8/11/2009	Cameron	CWPPRA	6,864,413	281 acres
Black Bayou Culverts Hydrologic Restoration	1/1/2010	Cameron	CWPPRA	6,641,125	540 acres

Project (Master Plan Related Project Highlighted in Yellow)	Date Completed	Location (Parish)	Source of Funding	Total Estimated Cost	Acres/Miles Improved
South Lake Decade Freshwater Introduction	7/12/2011	Terrebonne	CWPPRA	\$6,473,826	202 acres
Coastal Wetlands - Riverbend	1/31/2015	St. Bernard	CIAP	2,000,000	346 acres
Hydrologic Restoration Total				\$68,824,678	6,989 acres
Marsh Creation					
Dedicated Dredging on the Barataria Land Bridge	4/15/2010	Jefferson	State, CWPPRA, CIAP	\$36,281,893	2,800 acres
Mississippi River Sediment Delivery System - Bayou Dupont	5/20/2010	Jefferson, Plaquemines	CWPPRA, ARRA (Federal)	26,797,363	577 acres
Goose Point/Point Platte Marsh Creation	2/12/2009	St. Tammany	CWPPRA	22,117,777	436 acres
Black Lake Supplemental Beneficial Use Disposal Area	12/17/2010	Cameron	State	21,034,329	440 acres
Sabine Refuge Marsh Creation, Cycle 2	8/31/2010	Cameron	CWPPRA	17,750,000	
East Marsh Island Marsh Creation	1/19/2011	Iberia	CWPPRA	14,617,792	1,159 acres
Fringe Marsh Repair	1/17/2014	Plaquemines	CIAP	8,756,606	300 acres
NRDA Lake Hermitage Marsh Creation INCR2	12/5/2014	Plaquemines	Oil Spill	7,321,162	101 acres
Beneficial Use 2008 - Sabine Cycle	5/14/2010	Cameron	State	6,636,312	227 acres
Marsh Creation Near Freshwater Bayou	6/10/2015	Vermilion	State	5,700,000	96 acres
Dedicated Dredging - Point au Fer	1/15/2008	Terrebonne	State	2,469,250	67 acres
Marsh Creation Total				\$169,482,484	6,203 acres
Oyster Barrier Reef					
Bioengineered Oyster Reef	2/15/2012	Cameron	CWPPRA	\$1,510,433	5 acres
Oyster Barrier Reef Total				\$1,510,433	5 acres
Other					
Bayou Lafourche Fresh Water District - Walter S. Lemann Memorial Pump Station Renovations	10/6/2014	Ascension	Federal Hurricane Disaster	\$3,194,355	
Sediment Containment System for Marsh Creation Demonstration	8/21/2013	St. Charles	CWPPRA	2,323,073	3 acres
Enhancement of Barrier Island Vegetation Demonstration	10/14/2011	Terrebonne	CWPPRA	2,169,264	
CIAP Performance Evaluation - Rockefeller Refuge Performance Monitoring	4/23/2012	Cameron, Vermilion	CIAP	404,637	
Lost Lake Vegetation Project	6/14/2011	Terrebonne	Federal	161,000	
Other Total				\$8,252,329	3 acres

Project (Master Plan Related Project Highlighted in Yellow)	Date Completed	Location (Parish)	Source of Funding	Total Estimated Cost	Acres/Miles Improved
Shoreline Protection					
North Lake Mechant Landbridge Restoration	12/16/2009	Terrebonne	CWPPRA	\$40,254,428	604 acres
Barataria Basin Landbridge Shoreline Protection, Phase 1 and 2	3/5/2009	Jefferson	CWPPRA	32,538,623	1,304 acres
Orleans Land Bridge SP and Marsh Creation	6/3/2013	Orleans	CIAP	30,420,000	140 acres
Jonathan Davis Wetland Protection	1/12/2012	Jefferson	CWPPRA	30,136,616	510 acres
Lake Borgne Shoreline Protection	6/18/2009	St. Bernard	CWPPRA	26,793,123	229 acres
Biloxi Marsh	7/8/2014	St. Bernard	State	22,000,000	110 acres
Raccoon Island Shoreline Protection/Marsh Creation Project	4/25/2013	Terrebonne	CWPPRA	21,364,793	16 acres
West Lake Boudreaux Shoreline Protection and Marsh Creation	12/8/2008	Terrebonne	CWPPRA	19,143,813	145 acres
South Shore of the Pen Shoreline Protection and Marsh Creation	5/8/2012	Jefferson	CWPPRA	17,475,047	211 acres
Freshwater Bayou Bank Stabilization (CIAP)	6/9/2014	Vermilion	CIAP	13,568,804	223 acres
GIWW Bank Restoration of Critical Areas in Terrebonne	3/24/2014	Terrebonne	CWPPRA	13,022,245	345 acres
Grand Lake Shoreline Protection	1/26/2010	Cameron	CIAP	9,912,919	495 acres
Rockefeller Refuge Gulf Shoreline Stabilization Demonstration Project	10/26/2009	Cameron	CIAP	8,500,000	23 acres
GIWW Bank Restoration of Critical Areas in Terrebonne	8/6/2010	Terrebonne	CIAP	7,274,676	1,180 acres
Lake Salvador Shoreline Protection (Phase III)	1/18/2009	St. Charles	CIAP	3,452,189	844 acres
Shoreline Protection Emergency Restoration	10/17/2013	Plaquemines	CIAP	355,780	16 acres
Shoreline Protection Total				\$296,213,056	6,395 acres
Total Restoration				\$1,221,879,341	25,569 acres
Hurricane Protection					
Lake Pontchartrain and Vicinity			HSDRRS	\$4,218,256,580	128 miles
West Bank and Vicinity			HSDRRS	1,900,000,000	71 miles
Southeast Louisiana			HSDRRS	600,000,000	
New Orleans to Venice			HSDRRS	464,000,000	58 miles
Larose to Golden Meadow - Flood Protection (Master Plan)	9/5/2014	Lafourche	State	19,820,000	23 miles
St. Bernard Parish 40 Arpent Levee Repairs	2/28/2011	St. Bernard	State	\$5,000,000	

Project (Master Plan Related Project Highlighted in Yellow)	Date Completed	Location (Parish)	Source of Funding	Total Estimated Cost	Acres/Miles Improved
Franklin Floodgate Sinkable Barge and Pump Station (Phase 1)	10/30/2013	St. Mary	Federal Hurricane Relief	4,031,997	0.20 miles
East Harvey Canal Interim Hurricane Protection - Phase 1	7/8/2009	Jefferson	State	4,000,000	
Madisonville Bulkhead Project	11/28/2014	St. Tammany	Federal Hurricane Relief	2,144,266	0.10 miles
Valentine to Larose	3/14/2014	Lafourche	State	1,000,000	0.38 miles
Hurricane Protection Total				\$7,218,252,843	281 miles
Infrastructure					
LA-1 Improvements - Fourchon to Leeville Bridge	10/25/2010	Lafourche	CIAP	\$33,000,000	
LA 1 Improvements - Fourchon to Leeville Bridge (CIAP)	8/30/2009	Jefferson	State	18,000,000	
Morgan City Industrial Road	1/15/2015	St. Mary	CIAP	1,247,000	
Port of Iberia Bridge Replacement - David Dubois Road over Commercial Canal	5/16/2013	Iberia	CIAP	1,058,013	
Port of Iberia Bridge Replacement - Port Road over Commercial Canal	5/16/2013	Iberia	CIAP	625,792	
Trosclair Road	7/30/2009	Cameron	CIAP	400,000	
Infrastructure Total				\$54,330,805	
Total Protection and Infrastructure				\$7,272,583,648	281 miles
Source: Prepared by legislative auditor's staff using information obtained from CPRA.					

APPENDIX E: PROTECTION AND RESTORATION PROJECTS STILL IN PROGRESS (JANUARY 2008-JUNE 2015)

Project (Master Plan Related Projects Highlighted in Yellow)	Estimated Completion Date	Location (Parish)	Source of Funding	Total Estimated Cost	Projected Acres/Miles Benefited
Barrier Island (BI) / Headland Restoration (HR)					
Caminada Headland Beach and Dune Restoration INCR2 (Master Plan)	11/23/2016	Jefferson, Lafourche	Oil Spill	\$147,063,587	489 acres
Total BI/HR				\$147,063,587	489 acres
Hydrologic Restoration					
Central Wetlands Demonstration	1/12/2017	Orleans	CIAP (Federal)	\$3,561,832	17 acres
LPV Task Force Guardian Mitigation- Bayou Sauvage	7/1/2015	Orleans	HSDRRS	1,960,497	191 acres
Total Hydrologic Restoration				\$5,522,329	208 acres
Marsh Creation					
Mississippi River Long Distance Sediment Pipeline	10/5/2015	Jefferson, Plaquemines	CIAP	\$66,310,461	415 acres
Lake Hermitage Marsh Creation	7/29/2015	Plaquemines	CWPPRA (Federal/State Cost Share)	44,050,491	599 acres
Grand Liard Marsh and Ridge Restoration (Master Plan)	8/26/2015	Plaquemines	CWPPRA	42,804,677	502 acres
Bayou Dupont Marsh and Ridge Creation	10/5/2015	Jefferson	CWPPRA	38,324,646	317 acres
South Lake Lery Shoreline and Marsh Restoration (Master Plan)	5/2/2016	Plaquemines	CWPPRA	33,716,987	652 acres
Sabine Refuge Marsh Creation Cycles 4 and 5	7/8/2015	Cameron	CWPPRA	11,838,649	460 acres
Previously Authorized Mitigation WBV	2/13/2018	Jefferson, St. Charles	HSDRRS	11,000,000	1,217 acres
Total Marsh Creation				\$248,045,911	4,162 acres
Other					
Mississippi River Delta Strategic Planning - SSPM Expansion	3/11/2016	East Baton Rouge	CIAP	\$13,520,000	
Total Other				\$13,520,000	
Shoreline Protection					
LPV Mitigation Project, Manchac WMA Marsh Creation	1/28/2016	St. John the Baptist	HSDRRS	\$40,989,172	110 acres

Project (Master Plan Related Projects Highlighted in Yellow)	Estimated Completion Date	Location (Parish)	Source of Funding	Total Estimated Cost	Projected Acres/Miles Benefited
Barataria Basin Landbridge SP- Phase 3-CU7 and 8	11/2/2016	Jefferson, Lafourche	CWPPRA	\$26,351,988	5,587 acres
Non-rock Alternatives to Shoreline Protection Demo	11/13/2015	Iberia	CWPPRA	7,358,699	
Grand Isle - Fifi Island Breakwaters	12/31/2015	Jefferson	State	6,000,000	
East LaBranche Shoreline Protection	10/15/2015	St. Charles	CIAP	3,753,816	16 acres
Total Shoreline Protection				\$84,453,675	5,713 acres
Total Restoration				\$498,605,502	10,572 acres
Hurricane Protection					
Lake Pontchartrain and Vicinity			HSDRRS	\$1,014,755,700	All in Appendix D
West Bank and Vicinity			HSDRRS	1,600,000,000	All in Appendix D
Southeast Louisiana			HSDRRS	494,000,000	
Morganza to the Gulf (Master Plan)	N/A	Lafourche, Terrebonne	State	156,703,835	18 miles
New Orleans to Venice			HSDRRS	130,500,000	All in Appendix D
Jean Lafitte Tidal Protection	2/15/2016	Jefferson	State	23,032,639	3 miles
St. Charles West Bank Hurricane Protection Levee	10/30/2017	St. Charles	State	14,500,000	9 miles
Total Hurricane Protection				\$3,433,492,174	30 miles
Infrastructure					
Acadiana Regional Airport Street Improvements - Admiral Doyle Drive	10/15/2015	Iberia	CIAP	\$1,114,972	
Total Infrastructure				\$1,114,972	
Total Protection and Infrastructure				\$3,434,607,146	30 miles
Source: Prepared by legislative auditor's staff using information obtained from CPRA.					

APPENDIX F: CPRA CONTRACTS ACTIVE IN FISCAL YEAR 2015 WITH GOVERNMENTAL ENTITIES

Contractor	Number of Contracts	Net Contract Amount (With Amendments)
Terrebonne Levee and Conservation District	2	\$149,819,806
Louisiana Department of Wildlife and Fisheries	6	21,159,463
Bayou Lafourche Fresh Water District	1	20,000,000
Lafitte Area Independent Levee District	3	17,730,000
Sewerage and Water Board of New Orleans	2	11,811,832
Louisiana State University	10	8,349,274
St. Charles Parish Council	2	8,344,530
U.S. Geological Survey	9	8,177,297
Terrebonne Parish Consolidated Government	2	4,050,000
Louisiana Universities Marine Consortium	4	3,917,829
St. Mary Parish Consolidated Gravity Drainage District No. 2	1	3,870,000
Plaquemines Parish Government	2	3,550,000
Southeast Louisiana Flood Protection Authority - East	1	3,000,000
Lake Charles Harbor and Terminal	1	3,000,000
Town of Madisonville	1	2,515,654
St Bernard Parish Government	1	2,000,000
Iberia Parish Government	1	1,672,500
St. Mary Parish Council	1	1,655,000
Louisiana Department of Agriculture and Forestry	2	1,600,000
Louisiana State University Agricultural Center	1	1,500,000
Vermilion Parish Police Jury	1	360,000
University of Louisiana at Lafayette	2	291,765
City of New Orleans Audubon Park Commission	1	175,000
Louisiana Department of Transportation and Development	1	100,000
Nicholls State University	1	87,000
Cameron Parish Police Jury	1	75,000
St. James Parish Government	1	72,000
City of Mandeville Police	1	25,000
University of New Orleans	1	3,000
Total	63	\$278,911,949
Source: Prepared by legislative auditor's staff using information obtained from CPRA and State's Contract Financial Management System (CFMS).		

APPENDIX G: CPRA CONTRACTS ACTIVE IN FISCAL YEAR 2015 WITH NON-GOVERNMENTAL ENTITIES

Contractor	Number of Contracts	Net Contract Amount (With Amendments)
Weeks Marine, Inc.	4	\$280,007,897
HDR Engineering, Inc.	2	34,791,547
Water Institute of the Gulf	1	30,000,000
Coastal Estuary Services, LLC	1	20,385,596
Pine Bluff Sand & Gravel Company	1	15,702,993
Luhr Bros., Inc.	2	13,476,235
G.E.C., Inc.	3	13,000,000
CB&I Government Solutions, Inc.	2	10,500,000
Arcadis US, Inc.	3	10,000,000
Coastal Engineering Consultants, Inc.	2	10,000,000
Atkins North America, Inc.	2	9,500,000
Tetra Tech, Inc.	2	8,000,000
T. Baker Smith, LLC	2	8,000,000
Moffatt & Nichol, Inc.	2	7,500,000
Burk-Kleinpeter, Inc.	1	7,000,000
BCG-Dewberry JV	2	7,000,000
Stegall-Benton, LLC	2	7,000,000
Coast & Harbor Engineering, Inc.	2	6,000,000
C.H. Fenstermaker & Associates, LLC	2	6,000,000
CDM Smith, Inc.	2	6,000,000
URS Corporation	2	6,000,000
CH2M Hill	2	6,000,000
International Consulting Acquisition Corp.	1	5,673,870
Royal Engineers & Consultants, LLC	3	5,250,000
CSRS, Inc.	2	5,049,000
Covington Land Services, Inc.	1	5,000,000
Land Management Services, LLC	1	5,000,000
Oil Land Services, Inc.	1	5,000,000
SWCA Environmental Consultants	1	5,000,000
Professional Engineering Consultants Corporation	1	5,000,000
GCR, Inc.	1	5,000,000
Access Land & Title Services	1	5,000,000
Ardaman & Associates, Inc.	2	5,000,000
SJB Group, LLC	1	5,000,000
Louisiana Property Acquisition Company, LLC	1	5,000,000
Technology Engineers, Inc.	1	4,650,000
Great Lakes Dredge & Dock Company	1	4,250,220
Providence Engineering & Environmental Group, LLC	2	3,850,000
Lonnie G. Harper & Associates, Inc.	2	3,500,000
Grillot Construction, LLC	1	3,365,634

Contractor	Number of Contracts	Net Contract Amount (With Amendments)
GeoEngineers, Inc.	1	\$3,000,000
BEM Systems, Inc.	1	3,000,000
W.F. Baird & Associates, Ltd	1	3,000,000
Neel-Schaffer, Inc.	1	3,000,000
Eustis Engineering Services, LLC	1	3,000,000
Ben C. Gerwick, Inc.	1	3,000,000
AECOM USA, Inc.	1	3,000,000
MWH Americas, Inc.	1	3,000,000
Sigma Consulting Group, Inc.	1	3,000,000
C & C Technologies, Inc.	1	3,000,000
Brown and Caldwell, Inc.	1	3,000,000
Stanley Consultants, Inc.	1	3,000,000
Stantec Consulting Service, Inc.	1	3,000,000
John Chance Land Surveys, Inc.	1	3,000,000
HNTB Corporation	1	3,000,000
Ducks Unlimited	3	2,425,537
Sealevel Construction, Inc.	1	2,004,442
Morris P. Hebert, Inc.	2	2,000,000
Bertucci Contracting	1	1,901,719
Oats & Marino, APPC	1	1,700,000
Alden Research Laboratory	1	1,487,690
Professional Construction Services, Inc.	1	1,206,500
Methods Technology Solutions, Inc.	1	1,200,000
The Trust for Public Land	1	1,025,000
Acadian Environmental, Inc.	2	1,005,000
Water Campus, LLC	1	1,000,000
EMC, Inc.	1	1,000,000
HydroTerra Technologies, LLC	1	1,000,000
Lowe Consulting, LLC	1	1,000,000
Chustz Surveying, Inc.	1	1,000,000
Plauche & Carr, LLP	1	1,000,000
Coalition to Restore Coastal Louisiana	4	931,907
CF Bean, LLC	1	795,680
Volute, Inc.	1	496,053
Soil Erosion Services, LLC	3	420,872
Gahagan & Bryant Associates, Inc.	1	400,000
RAND	1	400,000
The Nature Conservancy	1	400,000
Ecological Restoration Services, LLC	1	308,840
Dennis, Bates & Bullen, LLP	1	300,000
Vilar & Elliott, LLC	1	250,000
Innovative Emergency Management	2	249,020
Dunlap Fiore, LLC	1	225,000
Kantrow, Spaht, Weaver & Blitzer	1	225,000
Wharton-Smith, Inc.	1	198,565
Breazeale, Sachse & Wilson, LLP	1	150,000
Janke & Associates, APLC	1	100,000

Contractor	Number of Contracts	Net Contract Amount (With Amendments)
Comite Resources, Inc.	1	\$100,000
Restore the Earth Foundation	1	100,000
Apache Louisiana Minerals, LLC	2	58,750
Independent Land Services, LLC	1	49,999
Dan Delich Consulting	1	48,000
Rose Financial Services, LLC	1	43,000
Leonard Shabman	1	42,500
Carl T. Friedrichs	1	37,500
Daniel L. Childers	1	37,500
Jennifer L. Irish	1	37,500
Edward Donald Houde	1	37,500
Ventura Publishing & Research, LLC	1	37,500
Michael K. Orbach	1	37,500
WaterWonks, LLC	1	37,500
B & J, Inc.	1	35,800
Associated Reporters, Inc.	1	25,000
Mary Catherine Hager	1	20,000
Patrice Melnick	1	10,000
Total	144	\$681,055,364
Source: Prepared by legislative auditor's staff using information obtained from CPRA and state's Contract Financial Management System (CFMS).		